

# CALIBRE®

CABLE DUCT SYSTEMS

## QUICK REFERENCE GUIDE

### SIMPLIFIED AND UNIFIED PERFORMANCE-BASED RANGE

The new CALIBRE® product range by Marley delivers a unified approach to cable ducting design, manufacture, and installation.

As a **fully featured PE and PVC cable duct range**, CALIBRE® CABLE DUCT Systems is manufactured to the electrical purposed AS/NZS 61386 standard with product classification according to a performance-based mechanical duty rating.

#### FULLY FEATURED

- › **Durability** range: Performance-based Mechanical Protection rating
- › **Productivity** features: Saves time and money for improved trenching
- › **Assurance** credential: Product based sustainability practices, supporting certifications (BEP), declarations (EPD) and licences for compliance

#### EASE OF SELECTION



#### TRENCH

Unified solutions for open cut installations



#### TRENCHLESS

Unified solutions for HDD installations

		TRENCH	TRENCHLESS	
DURABILITY	<b>A</b>	Category A Underground Wiring System	✓	✓
	<b>VHD</b>	Very Heavy Duty	✓	✓
	<b>HD</b>	Heavy Duty	✓	✓
	<b>B</b>	Category B Underground Wiring System	✓	✓
	<b>MD</b>	Medium Duty	✓	✓
	<b>Service Temperature Range</b>	✓	✓	
PRODUCTIVITY	<b>Service ID</b>	✓	✓	
	<b>Metre Marked</b>		✓	
	<b>Custom Length</b>		✓	
	<b>Extensive PE Fittings</b>		✓	
	<b>Extensive PVC Bends</b>	✓		
ASSURANCE	<b>PE / PVC 100% Recyclable</b>	✓	✓	
	<b>Standards Compliance &amp; Licence</b>	✓	✓	
	<b>EPD Declaration</b>	✓	✓	

# THE CALIBRE® RANGE

## CALIBRE® TRENCH



SIZE (ID)	LENGTH (m)	DUTY	MATERIAL	ORANGE	GREEN	WHITE	RED	CRATE QUANTITY
20	6	Non Rated	PVC		TC20GRDUCT	TC20WHDUCT	700.20.6.RD	900
32	6	Non Rated	PVC	700.32.6.0				230
40	6	Non Rated	PVC	700.40.6.0				180
50	6	Non Rated	PVC	700.50.6.0	TC50GRDUCT		700.50.6.RD	149 150 105
65	6	Non Rated	PVC	700.65.6.0		TC50WHDUCT.RRJ		96
80	6	MD HD	PVC	700.80MD.6.OR 700.80HD.6.OR				66
100	6	MD HD VHD  Non Rated	PVC	700.100MD.6.OR 700.100HD.6.OR 700.100VHD.6.OR  TC110.OR.RRJ (KIWI Rail)	TC110GRDUCT	TC110WHDUCT.RRJ	700.100.6.RD	60
150	6	MD HD VHD	PVC	700.150MD.6.OR 700.150HD.6.OR 700.150VHD.6.OR				28
140 (OD)	12	HD	PE	600.140HD.12.OR				8
160 (OD)	12	VHD	PE	600.160VHD.12.OR				8

## CALIBRE® TRENCHLESS



SIZE (OD)	DUTY	MATERIAL	COIL LENGTH 50m	COIL LENGTH 100m	COIL LENGTH 150m	COIL LENGTH 200m	COIL LENGTH 500m	COIL LENGTH 1000m
25	MD	MDPE				600.25MD.200.GN		
32	MD	MDPE				600.32MD.200.OR 600.32MD.200.GN 600.32MD.200.RD	600.32MD.500.OR 600.32MD.500.GN	600.32MD.1000.OR 600.32MD.1000.GN
40	MD	MDPE				600.40MD.200.OR		
50	HD	HDPE		600.50HD.100.OR 600.50HD.100.GN 600.50HD.100.RD				
63	HD	HDPE	600.63HD.50.GN	600.63HD.100.OR 600.63HD.100.GN 600.63HD.100.RD	600.63HD.150.OR 600.63HD.150.GN			
90	HD	HDPE		600.90HD.100.OR				
110	HD	HDPE	600.110HD.50.OR 600.110HD.50.GN	600.110HD.100.OR 600.110HD.100.GN 600.110HD.100.RD				
125	HD	HDPE		600.125HD.100.OR				
140	HD	HDPE	600.140HD.50.OR	600.140HD.100.OR				
160	VHD	HDPE	600.160VHD.50.OR	600.160VHD.100.OR				

# TRENCH - UNDERGROUND INSTALLATION

## WHY HEAVY DUTY CABLE DUCTING IS BEST PRACTICE

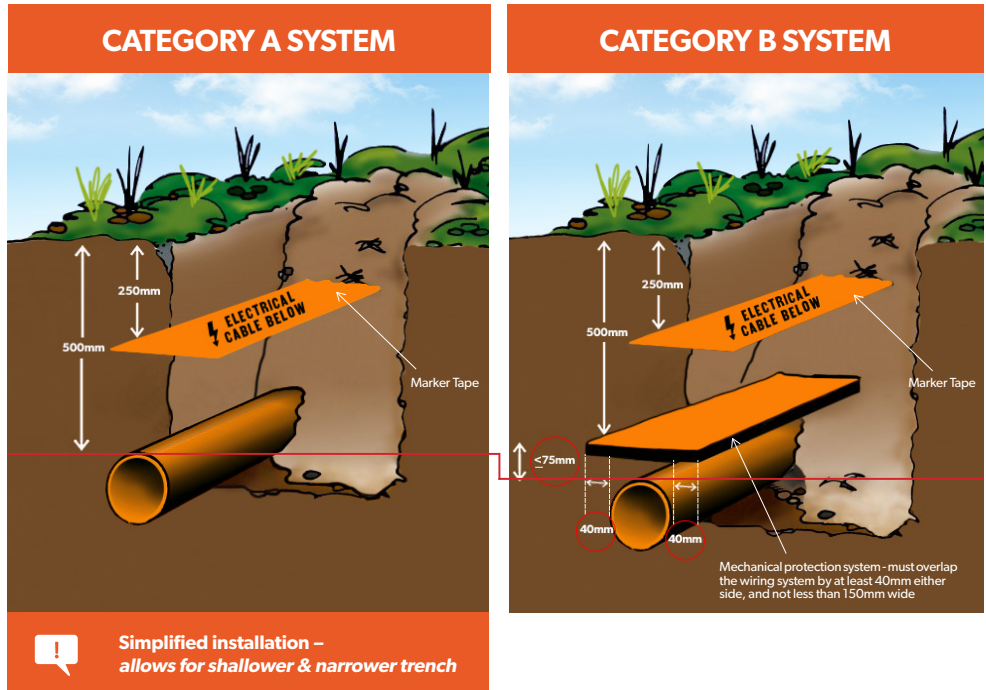
For trench underground wiring systems where there is no surface covering, significant labour, time and cost savings can be made when installing to CATEGORY A Underground Wiring system compared to CATEGORY B. **Critically, the longer the trench the greater the savings.**

### CATEGORY A SYSTEM

CALIBRE® Trench cable duct (Heavy Duty / Very Heavy Duty) where **NO ADDITIONAL** mechanical protection is required

### CATEGORY B SYSTEM

CALIBRE® Trench cable duct (Medium Duty) where **ADDITIONAL** mechanical protection is required



# TRENCHLESS - STANDARDS & SPECIFICATION

The following table illustrates the interrelationship between the wiring rules, manufacturing standards, jointing specifications and towing loads.

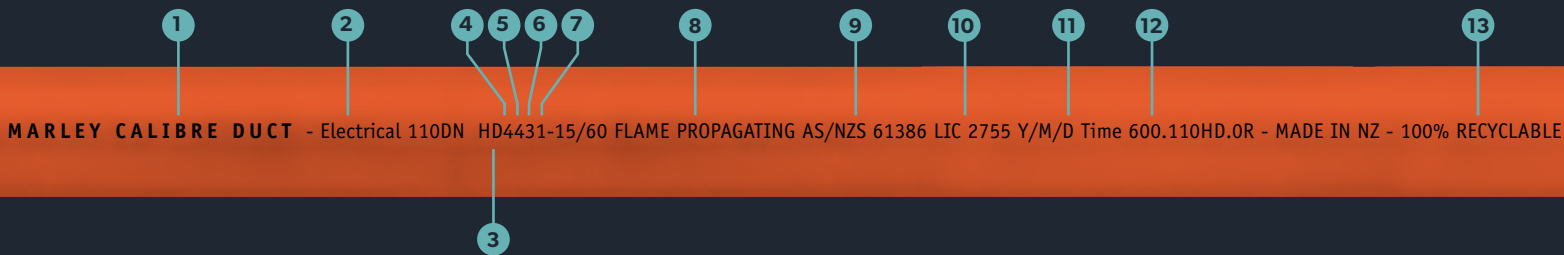
AS/NZS 3000		AS/NZ 61386			JOINTING SPECIFICATION (ELECTROFUSION/COMPRESSION FITTINGS)		TOWING LOADS
DN	UNDERGROUND WIRING RULES	DUTY	SN	DIMENSIONS (OD, T, OVALITY)	SDR	MATERIAL DENSITY	Force (KN) (@20°C)
20	CATEGORY B	MD	N/A	AS/NZS 4130 (TABLE 2)	9	MEDIUM DENSITY (MDPE)	0.78*
25					11		1.18*
32					13.6		2.65*
40					17		2.16
50	CATEGORY A	HD	>10	(FITTING/JOINTING COMPATIBILITY)	13.6	HIGH DENSITY (HDPE)	3.14
63					17		4.91
90					17		10.79
110					17		15.70
125					17		20.60
140					17		24.53
160	VHD	>25			17		33.35

### NOTES

- For AS/NZS 3000 Category A underground wiring systems, Heavy or Very Heavy Duty cable ducting is best suited for trenchless applications given the inability to install additional mechanical protection.
- For AS/NZS 3000 Category B underground wiring systems, medium duty cable ducting is best suited for sub ducting applications
- Please refer to specific Electrical Distribution Network policies and procedures which may differ to the above specification
- \*It is recommended that the smaller diameters be pulled by hand.

# PRODUCT AUTHENTICITY

Not all brands of Cable Duct in the market perform to the same level. For proof of intended performance, check the mandatory print requirements that are marked on the Cable Duct.



- 1 Manufacturer and/or brand name identification
- 2 Designed specifically to protect electrical wiring
- 3 Classification Rating  
(VHD = Very Heavy Duty)  
(HD = Heavy Duty)  
(MD = Medium Duty)
- 4 Compression Duty / Ring Stiffness Rating  
(Rating 5 = Very Heavy Duty)  
(Rating 4 = Heavy Duty)  
(Rating 3 = Medium Duty)
- 5 Impact Duty Rating  
(Rating 5 = Very Heavy Duty)  
(Rating 4 = Heavy Duty)  
(Rating 3 = Medium Duty)
- 6 Minimum Service Temperature rating (Rating 3 = -15° c)
- 7 Maximum Service Temperature rating (Rating 1 = 60° c)
- 8 Resistance to burning (PE duct only = flame propagating)
- 9 Cable Duct manufacturing standard
- 10 3<sup>rd</sup> party Licence Verification for the specific manufacturing site
- 11 Exact date and time of manufacture
- 12 Marley item code for easy tracking  
PVC = 700 Series  
PE = 600 Series
- 13 Recyclability

## PROOF OF ASSURANCE

Certifications and standards to demonstrate compliance and ensure quality is consistency achieved each and every time.



Bureau Veritas provides independent third-party verification of compliance in the manufacture of CALIBRE. Licences are issued by manufacturing location.

Manurewa: BV Lic. 2755

Horotiu: BV Lic. 2970

Tinwald: BV Lic 2806